Cluster Based Economic Development: A Key to Regional Competitiveness



ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

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Introduction: The Importance of Industry Clusters

Our economy is changing in terms of growth opportunities and adjustment challenges. This fact alone has done much to stimulate new thinking and practice in economic development. Many economic development leaders have been able to guide their regions through a process that builds upon an understanding of their region's changing economy, and in doing so, have helped forge a vision and develop commitments for necessary action. Drawing on case studies of 17 initiatives and more than a decade of state and local experience in regional economic development, this summary describes a framework for regional economic development based on the recognition that healthy regional economics are composed of industry clusters including their supporting economic infrastructure. While this framework must be adapted to the unique circumstances of each region, it has proven to be useful for bringing regional stakeholders together to address pressing economic concerns and creating the foundation for sustained competitiveness into the 21st century.

Industry Clusters: A Key to Competitiveness in the New Economy

Industry clusters consist of agglomerations of competing and collaborating industries in a region networking into horizontal and vertical relationships, involving strong common buyer-supplier linkages, and relying on a shared foundation of specialized economic institutions. Because they are built around core export oriented firms, industry clusters bring new wealth into a region and help drive the region's economic growth.

Economic Infrastructure: A Key to Cluster Performance

Industry cluster competitiveness derives not only from the concentration of related industries, suppliers and services in the same place, but also from access to highly specialized economic inputs that are not usually provided solely by the business sector. These resources, often referred to as "economic infrastructure" or "foundations," include institutions that provide:

- Adaptable Skills
- Accessible Technology
- Adequate Financing
- Available Infrastructure
- Advanced Communications
- Acceptable Regulatory and Business Climate
- Achievable Quality of Life

Collaboration: How Economic Infrastructure for Clusters is Improved

When regions have been successful at nurturing industry clusters they typically have developed high quality economic institutions, responsive to the specialized needs of existing and emerging clusters in the region. When this occurs strong civic leadership and collaboration among organizations, across sectors, and across communities in the region have often been central to success. This regional culture creates what could be called "collaborative advantage." This is what defines a successful market—buyers and suppliers working with each other and using proximity and economies of scale to improve innovation and access to markets.

Gauging Your Need for Cluster-Based Development

Because no two regions face identical challenges in adapting to economic change, economic development leaders must seek an approach that is

adaptable to the political, economic and social circumstances of their region. The cluster framework can be a valuable tool for effective economic change because it is:

Market-Driven— focusing on bringing the demand and supply side of the economy together to work more effectively.

Inclusive— reaching out to companies large and small as well as suppliers and supporting economic institutions.

Collaborative— placing great emphasis on collaborative solutions to regional issues by participants, motivated by self-interest.

Strategic—helping stakeholders create a strategic vision of their region's next generation economy shared by many different constituencies and providing motivation and commitment to action.

Value-Creating— improving depth (more suppliers) and breadth (attracting more industries) to increase regional income.

When Is the Cluster Approach Right for You?

The Right Economic Scale: You are thinking regionally rather than about a single community or jurisdiction.

The Right Economic Challenge: You are responding to the need for economic restructuring, to improve economic inputs used by industries and effectively shape development projects.

The Right Economic Focus: You are thinking about your region's cluster portfolio and a regional vision rather than about one industry or company.

The Right Leadership and Strategy Process: You have leaders and organizations who care about the region's economy and are ready to use an inclusive and collaborative process to engage industry and institutions.

The Right Capacity to Take Action: You have a tradition of working regionally to face economic challenges with adequate technical and financial resources and a readiness to work together for shared returns.

Cluster-Based Economic Development: A Four Stage Process

Stage I: Mobilization— Building interest and participation among the different constituencies needed to carry out the initiative.

Stage II: Diagnosis— Assessing the industry clusters that comprise the economy and the economic infrastructure that supports cluster performance.

Stage III: Collaborative Strategy— Convening demand-side stake-holders (companies in each cluster) and supply-side stakeholders (public and private supporting economic institutions) in working groups to identify priority challenges and action initiatives to address shared problems.

Stage IV: Implementation— Building commitment of cluster working group participants and regional stakeholders to actions and identifying or creating an organization to sustain implementation.

Cluster Based Economic Development: A Key to Regional Competitiveness



Primary Lessons Learned from Cluster-Based Experience

- 1. Recruit highly committed leadership.
- 2. Develop a strategy to ensure adequate resources throughout the process.
- 3. Choose the right geographic level of focus—regions vs. cities and states.
- 4. Find tools to sustain momentum between stages.
- 5. Engage potential implementing institutions from the earliest stages of the process.

Stage I: Mobilization Lessons

Use economic challenges as windows of opportunity to bring stakeholders together.

Kick-start mobilization by creating or identifying an organization dedicated to the initiative's goals.

Cultivate broad public and private sector participation and early "buy-in."

Cultivate stakeholders and "champions."

Mobilization Approaches

- East Tennessee 21st Century Jobs Initiative: With impetus from Oak Ridge National Laboratory, a regional marketing organization (Tennessee Resource Valley) managed a 15 county initiative.
- Arizona ASPED Initiative: Started by a private sector entrepreneurs group, Enterprise Network, grew into a partnership with the State and the economic development councils of Phoenix and Tucson and became Arizona Strategic Planning for Economic Development (ASPED).
- Joint Venture Silicon Valley: Started by concerned business leaders,
 Joint Venture Silicon Valley Network evolved into a regional public-private partnership that supported the regional strategy and the initial actions.

Stage II: Diagnostic Lessons

Provide an independent analyst who can "tell it like it is."

Involve and build momentum for the initiative across the community through a participatory diagnostic process.

Use cluster analytic techniques to:

- —Identify regional cluster portfolio
- —Benchmark regional cluster position
- -Benchmark regional economic infrastructure
- --- Assess strategic challenges and opportunities

Diagnostic Approaches

- Southwestern Pennsylvania: Multiple institutions, including universities, chambers and economic development organizations, participated in the regional diagnosis.
- South East Los Angeles: A local consultant did initial work followed by a national firm who provided an in-depth cluster portfolio analysis.
- Ventura County: A neutral consultant was needed to provide a credible analysis of the situation.

Stage III: Collaborative Strategy Lessons

Hold events that confront and engage participants from key industries and institutions in the region.

Create highly inclusive cluster working groups that are market-driven to set the stage for implementation.

Select working group leaders who are committed and can recruit high profile participants reflecting small and large companies in the region.

Create accountability mechanisms and progress milestones throughout the process.

Develop concrete action plans focusing on reform and redesign of services, adding value to existing resources, and enabling market innovation.

Establish the market viability of each initiative to ensure the necessary support from stakeholders for taking action.

Collaborative Approaches

- Washington Manufacturing Networks: Industry networks were used to bring companies together to do what individual firms could not.
- Florida Cornerstone: Did not use organized cluster groups as an integral part of initiative, but focused on building public sector capacity to support all the state's clusters.
- Joint Venture Silicon Valley: Used both cluster and economic infrastructure working groups to generate six cross-cutting initiatives and 43 individual cluster efforts.

Stage IV: Implementation Lessons

Create a management stewardship group by identifying a new or existing organization to spearhead and oversee the initiative.

Use the cluster framework to facilitate supply and demand side connections.

Identify sources for ongoing funding commensurate with the type and scale of action initiatives.

Sustain sources of new leadership.

Develop a monitoring system to track activities and communicate outcomes, focusing on regional economic performance, structure and health of industry clusters, and responsiveness of economic infrastructure to clusters.

Implementation Approaches

- South East Los Angeles: Created the Gateway Cities Partnership,
 linking 26 cities which had never worked together, but needed to
 in light of defense/aerospace cutbacks.
- Connecticut: The current governor created a private-sector lead group, supported by a state department to manage the transition from cluster strategy to action.
- St. Louis: Established the St. Louis Critical Technology Partnership to provide a regional forum for information exchange, networking and consortium building.
- El Paso and Chihuahua: Two separate regional initiatives, El Paso Agenda 21 and Chihuahua's Siglo XXI, came together through private sector action to launch the El Paso/Juarez Interplex World Trade Center.

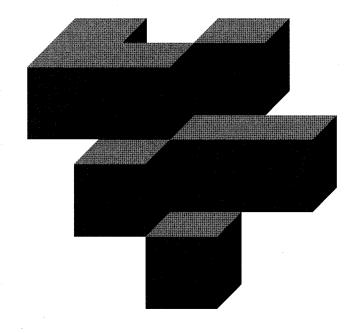
Conclusion: An Integrative Process

The cluster-based approach to economic development can elevate economic development from an often compartmentalized and isolated activity that focuses on just one project at a time to an integrative and enduring process. The cluster-based approach can achieve a leveraged impact on economic development through engaging the region's key suppliers in a dialogue with their customers:

- Linking education providers with workforce managers.
- Connecting technology providers with product developers.
- Matching financial investors to new or existing enterprise.
- Shaping physical infrastructure to meet industry operational needs.
- Investing in information infrastructure to enhance cluster performance.
- Adjusting administrative systems to maximize cluster productivity.
- Bringing housing, health and social services providers together with clusters.

The challenge of effective cluster-based economic development is to bring industries and their public and private suppliers together to share responsibility for the outcomes of economic development actions. The goal is to achieve tangible outcomes and to use those initial outcomes as a platform for ongoing improvement in the regional economy. The effort to be inclusive in cluster-based economic development pays off even when modestly accomplished. By changing the terms of the dialogue within the regional economy, businesses, government and other institutions can build new ways of achieving individual and region-wide goals, giving up a traditionally unilateral view of economic development as being "government's" job.

As the logic and tools of cluster strategy become better integrated into the vocabulary and practice of economic development, regions nationwide can look forward to creating more inclusive and market-driven economic development environments.



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